PART ONE

BACKGROUND

CHAPTER ONE

WHY SOCIAL MEDIA?

There are a number of reasons to use social media in educational settings. First, social media have the potential to enhance learning and meet pedagogical needs thanks to the array of media characteristics and functionality. Next, many instructors and students are already using social media in their personal and professional lives. They have a familiarity with most social media, which may lead them to be more open to using social media for their classes. Social media are "social" in that they facilitate the creation and sharing of information, and they have the potential to enhance dialogue and collaboration as well. In the past few decades, scholars and researchers have come to the conclusion that the social variables in the classroom and throughout a university are more important in influencing student outcomes than their demographic variables (Kuh, Pace, & Vesper, 1997). Most notably, many scholars have stressed the importance of interactivity and engagement on student learning (Carini, Kuh, & Klein, 2006). According to Chickering and Gamson (1987), good practices in undergraduate education include encouraging contact between students and faculty, developing a reciprocity and cooperation among students, and encouraging active learning. Social media have the potential to enhance these good practices.

Researchers have been highlighting the importance of interactivity on student outcomes (e.g., learning, retention, satisfaction) for decades. Recently, the focus has been more on the construct of engagement, which is

a transformation of early research focusing on interactions. Many college campuses administer the National Survey of Student Engagement (NSSE), a national survey that measures engagement on college campuses, and the College Student Experiences Questionnaire (CSEQ). They serve as a benchmark for universities and have many items in common. Items in these surveys have been noted as indicators for Chickering and Gamson's (1987) good practices of student interaction, cooperation among students, and active learning. These indicators are also considered to be reliable and valid indicators of student outcomes (Chickering & Gamson, 1991; Kuh, Pace, & Vesper, 1997).

In addition, the research has been exploring interactions in and out of the classroom and the effect they have on student outcomes. Some researchers argue that these interactions have the greatest impact on students (Wilson, Gaff, Diensky, Wood, & Bavry, 1975) and are an important part of a quality undergraduate experience (Kuh, 1981). Others have noted the impact on student satisfaction (Astin, 1977), retention (Astin, 1977, 1993), and academic achievement (Astin, 1993). Further, participating in learning communities has proven to increase engagement (Shapiro & Levine, 1999; Zhao & Kuh, 2004). It is clear that students' interactions with faculty and other students can have a great impact on several student outcomes and could be considered pivotal to their success. It is through the enhancement of student engagement and interactivity that social media can affect student learning.

The purpose of this book is to be a guide for educators who are interested in using social media to enhance their teaching and have a positive impact on student learning. The book will examine the concept of social media, share how social media can be used for professional development by instructors and students, consider the ways in which educators can use social media activities to enhance teaching and learning, explore media characteristics and features of social media, and discuss considerations in implementing social media.

Popularity of Social Media

The adoption of social media has greatly increased over the past few years. Facebook has 800 million users (Facebook, 2011), Twitter has 200 million users (BBC, 2011), and LinkedIn has 100 million users (LinkedIn, 2011). Facebook is the most popular social networking tool in our society and with our students today. It is where they already live. More than 70% of adults, young adults, and teens who are online use Facebook (Lenhart, Purcell, Smith, & Zickuhr, 2010). Previously, reports from undergraduate students indicate that 85.2% of students

overall with 95.1% of 18- and 19-year-olds use social media, primarily Facebook, and usually on a daily basis (Salaway, Borreson Caruso, & Nelson, 2008). More recently, 96% of undergraduate students reported using Facebook (Smith & Caruso, 2010). With the dominant use by students, educators look to harness the power of Facebook.

Other social media, such as Twitter and LinkedIn, are quickly growing in their use. In a survey designed to examine social media habits, my students reported heavy use of Facebook; although most of these young people had heard of Twitter at the time, they were not using it (Joosten, 2009; Parry, 2009). Though the majority of teens do not tweet, we have seen these numbers increasing over the past couple years. As Young (2010b) reported on the findings of a Pew Internet study, "College students are far more likely to use Twitter than are other segments of the U.S. population . . . full-time or part-time college students who go online [to use Twitter] is 18 percent" (para 1). Also, researchers reported that 43.3% of undergraduate students reported updating microblogs like Twitter (Smith & Caruso, 2010). We are also seeing tremendous growth in use of LinkedIn and other social media depending on the discipline, age, and other variables. For example, senior students who are preparing for graduation and looking to secure a career path are more likely to use LinkedIn (Salaway, Borreson Caruso, & Nelson, 2008), but the overall use by students is still fairly low at 11.2% (Smith & Caruso, 2010). The newest to arrive is Google+ with over 25 million users (Albanesius, 2011). Social media are popular, and we continue to see tremendous growth even for the less popular sites.

Mobile devices can play an important role in facilitating the use of social media for teaching and learning. Many social media have functions that allow students to receive and send text messages or updates through mobile apps or applications. Researchers report 90% of 18- to 29-year-olds use their mobile phones to send and receive text messages (Smith, 2010); teens send and receive over 3,000 text messages a month (Neilson, 2010); and traditional-aged students send and receive over 1,600 a month (Neilson, 2010). Again, in my survey of students' use of technology, students reported high use of text messaging with their mobile devices, 88.4%, and they desire to receive text messaging updates of course information, 70.5% (Joosten, 2009).

Other social media use among students includes video-sharing sites and social bookmarking.

- 71% of online adults and 92% of traditional college-aged students reported watching videos on a video-sharing site, e.g., YouTube and Vimeo (Moore, 2011).
- 42.4% contribute to video-sharing sites (Smith & Caruso, 2010).

- 25.1% of students contribute to social bookmarking sites, e.g., Diigo and Delicious (Smith & Caruso, 2010).

The growth seen in the social use of technology by students (or incoming students), whether through a desktop computer or a device like their mobile phone, deserves our attention. Through their own use of social media, educators are realizing that social media offers the functionality to enhance student outcomes in the classroom.

What Is Social Media?

There are a number of social media that individuals use on a daily and weekly basis. However, many of these users have difficulty defining the term *social media* (Segreto, 2011). In an attempt to build a shared meaning of social media, social media were utilized to "crowdsource" a definition to form a comprehensive construct. Crowdsourcing, which is a distinctive characteristic of social media, occurs when an act, such as problem solving, is outsourced to a network of individuals who offer an array of solutions (see Brabham, 2008; Howe, 2006). Also, these solutions can represent the ideas and opinions of a sample of professional colleagues.

As previously mentioned, not only will this book be about social media, but the book's content, at least in part, is a product of social media activities. Using several social media, individuals sharing a common interest in education and technology were asked to answer the question, "What is social media?" These colleagues were asked to tag their responses with a hashtag, #edusocmedia, so that the comments and posts of individuals would be easy to search and locate the conversations. In addition to primarily text-based messages (e.g., Twitter), individuals were encouraged to post their video definitions to YouTube. Dozens of tweets and YouTube videos from colleagues were collected. Examples of posts are available in Table 1.1. These responses were collected and analyzed using a visualization tool, Wordle, where popular words used to describe social media increase in size based on their frequency (see Figure 1.1). The key words and themes evident in the visualization were then constructed into the following statement: A virtual place where people share; *everybody and anybody can share anything anywhere anytime.*

Web 2.0

Perceptions of social media are indicative of the characteristics and features of the technology and the user. Social media are considered Web 2.0 applications,

TABLE 1.1. WHAT IS SOCIAL MEDIA #EDUSOCMEDIA TWEETS

`@sholtutm` social media is about the social not the media. People connecting to people. #edusocmedia

`@dolanatpsu` #edusocmedia a channel that allows for instant, unfiltered conversation, collaboration & community

`@ericaabramson` defining social media: collaborative, accessible, no boundaries #edusocmedia

`@spennel198` Social media is about anybody, anywhere sharing information about anything on an accessible space. #edusocmedia

`@gjerdery` #edusocmedia is a distributed comm. platform where you control the degree to which you participate, tending to be more open than private.

`@athlwulf` Social media is technologies used to assist in facilitating connections and interactions between people #edusocmedia

`@sholtutm` "Media" will change . . . "social" will not. #edusocmedia

`@ifoundbob` Our def of #edusocmedia is "Digital Socialization—a virtual sharing life, learning and self."

FIGURE 1.1. SOCIAL MEDIA WORDLE FROM CROWDSOURCED RESPONSES

which are an array of online tools and services that are web-based and dynamic in nature. They are user-centered and encourage interaction, collaboration, and democracy (Graham, 2005). Specifically, Web 2.0 applications provide "community and collaboration on a scale never seen before" (Grossman, 2011, para 3). Examples of popular Web 2.0 technologies, which have been explored by educators as a way to improve teaching and learning, include blogs, wikis, social bookmarking, and social networking sites. The potential of Web 2.0 to connect

people, facilitate collaboration, and build community is well known (Hoegg, Martignoni, Meckel, & Stanoevska, 2006). Individuals, businesses, and educational institutions are taking note and advantage of the evolution, which offers new tools that are free (at some level), open, and accessible. In comparison to traditional institutional applications, these applications have increased functionality and have a greater reach to accomplish needed tasks.

Social media are Web 2.0 applications that have the potential to increase interactions among individuals through creating and sharing. Some examples of the most popular and growing social media, which have been mentioned, are Facebook, Twitter, LinkedIn, and YouTube, and there are numerous additional technologies that can be considered social media. Kaplan and Haenlein (2010) clarify the relation of social media to Web 2.0 by explaining social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user-generated content" (p. 61). User-generated content (UGC) in social media at a rudimentary level means digital text, images, audio, and video that are created and shared. Social media include a variety of web-based applications that facilitate communication (Twitter, Facebook, blogs), collaboration (wikis, social bookmarking), and multimedia sharing (Flickr, YouTube) through the creation and exchange of UGC.

Social networking sites are one of the most popular types of social media and Web 2.0 technologies. Social networking sites include sites that enable you to create a profile, make connections, and share your connections in order to build relationships and networks. Boyd and Ellison (2007) defined social networking sites (SNS) as "web-based services that allow individuals to

1. construct a public or semi-public profile within a bounded system;
2. articulate a list of other users with whom they share a connection; and
3. view and traverse their list of connections and those made by others within the system" (para 4).

Therefore, social networking sites are social media, which both can be considered Web 2.0 technologies (see Figure 1.2). In summary, social networking sites facilitate the creation and exchange of UGC (status posts, photos, videos) and, additionally, offer the user the opportunity to create a profile, connect with other users in the system, and share those networks with others.

The arrival of Web 2.0 technology has facilitated the development of an array of dynamic web-based technologies, including social networking sites and many other social media. The history of the term *social media*, which lies in the 1990s, focuses on the affordances of Web 2.0 technologies. For instance,

FIGURE 1.2. WEB 2.0, SOCIAL MEDIA, AND SOCIAL NETWORK SITES

Source: http://upload.wikimedia.org/wikipedia/commons/c/c7/SocialMediaVennDiagram.jpg
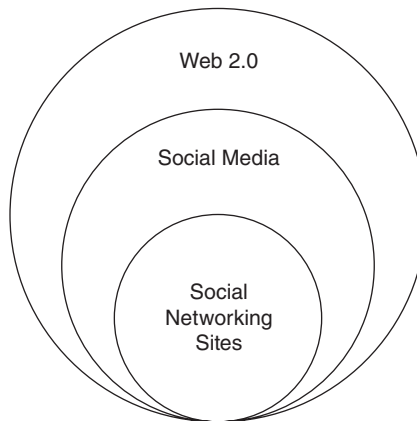
Bercovici (2010) notes that the term was derived from an executive at America Online (AOL), "social media, places where they can be entertained, communicate, and participate in a social environment . . . [a] mashup of technology and communications and media itself" (para 4). Most recently, Junco, Heiberger, and Loken (2011) defined social media in the following manner: "Social media are a collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing" (p. 1). As we can see, the initial construct surrounding social media includes themes such as sharing, community, communicating, and participating, although there is not a consistent definition used by researchers, bloggers, or the mass media.

Social Process

Many times the communication process can be seen as a black box. It is difficult to capture data on the process and determine predictability. We pay more attention to the outputs, but give little attention to the process. Late in the 1970s we started seeing the development of what we call today computer-mediated communication or CMC. Hiltz and Turoff could be considered the catalyst for decades of research on CMC. In their book *Network Nation*, Hiltz and Turoff (1978) referred to human communication via computer (HCC). Hiltz and Turoff (1978) spurred research and exploration into the actual process and said

that "to understand computer mediated communications at all, you must see them as a social process" (p. 27). Further, they argued that computer-supported communication could transform society, which is what many claim that social media has done for us today. As this illustrates, increasing our understanding of the theoretical and empirical underpinnings of CMC can better inform selecting, implementing, evaluating, and researching social media.

To help us further answer the question "What is social media?," we also need to explore past research investigating online interactions. One of the primary activities at the heart of social media use is communication. Therefore, investigating the research surrounding CMC provides insight into the ways in which users have appropriated social media in research and practice (see Boyd & Ellison, 2007). More recently, we have seen information referencing telephones or e-mail as social media (see O'Dell, 2011), which can be dated back to the 1970s or earlier, making the argument that social media can be positioned as another form of CMC. To enhance the understanding of the concept that has eluded a clear definition, we will briefly examine the research and theories of the media characteristics of CMC over the past few decades.

CMC theories, models, and research inform the process of enhancing our understanding of a tangible construct for social media. Because technology provided an alternate medium through which we communicate, researchers have been comparing CMC to face-to-face communication as if face-to-face communication was the gold standard. We see this trend prominently in the research for online learning, as well. There is a tendency to believe that communication mediated by technology will be lacking and not have the same qualities as face-to-face communication. Yet, the benefits and affordances of CMC are becoming more obvious in today's society.

Spanning Temporal and Spatial Boundaries

Technology's most noted contribution in the field is that it allows us to communicate in ways that span temporal and spatial boundaries. No longer do we need to interact only in a face-to-face setting. We can communicate synchronously and asynchronously while being separated geographically. In other words, we can be at home or on the go and still connect with others. Mobile devices have greatly enhanced this characteristic by enabling us to communicate anywhere, anyplace, anytime. We are no longer tied down by our telephone lines, Ethernet cords, or desktop computers. The primary affordance of providing distanciation through time and space cannot be argued, especially in the global society in which we now live.

Beyond these affordances, many researchers have spent decades exploring the differences in the process and outcomes when communicating through a technology-enhanced channel. These differences have been studied for almost 50 years starting in the 1960s (or earlier, depending on our definition of technology) when researchers were comparing face-to-face communication with telephone communication (e.g., Sinaiko, 1963; Morley & Stephenson, 1969; Short, Williams, & Christie, 1976). The work on media characteristics and differences, even dating back to telecommunication research and theories, can guide our work on social media. Much of the research is already guiding our exploration of the effectiveness of online learning, online pedagogy, and course design.

The term *CMC* has been used interchangeably with other terminology such as electronic communication, technology-mediated communication, computer conferencing, human computer interaction (HCI), computer-mediated communication systems (CMCS), and group support systems (GSS). At the basic level, CMC illustrates communication taking place through a technology-enhanced medium that has the ability to span time and space; two or more people are sending and receiving messages. Early studies of computer-mediated communication in the 1980s tended to focus on two types of CMC described as synchronous and asynchronous communication systems, better known as e-mail and chat, at a rudimentary level. Because we are familiar with e-mail and chat, we can use our knowledge about their characteristics and affordances to understand the effectiveness of social media. E-mail is one of the most commonly studied forms of CMC and is traditionally considered a form of asynchronous computer conferencing.

Although many of us are flocking to social media for certain types of communication needs over e-mail, it may be based on the inability of e-mail's media characteristics to accomplish our tasks or meet our needs in today's fast-moving and open world. E-mail is a closed system sharing characteristics with more formal communication such as letter writing. In contrast, social media is more informal, which may be due, at least in part, to its affordances (e.g., character or word limitations, synchronous style) where we are able to learn about others through their profiles, public status updates, or posts, to connect with others beyond adding them to our address book, to publically articulate our list of connections with others, to openly share series of images and videos, and to send and receive instant updates of information. However, e-mail has become the main, and sometimes only, supported computer-mediated technology within our institutions and organizations. Because of the limitations associated with the asynchronous nature of e-mail communication, synchronous chat was a focus for development in the 1990s.

Synchronous chat developed by AOL and others was seen as a communication medium to increase participation and build community online. As previously discussed, synchronous chat at AOL spurred ideas leading to the first mention of social media (see Bercovici, 2010). We have been using synchronous chat in our classrooms for over a decade. However, chat is slowly becoming popular for education institutions in providing more immediate support and services to their students who expect immediacy in what is becoming a 24/7 society rather than one that operates on a 9-to-5 schedule. Chat is even being used for intraorganizational communication within units and across campus. Obviously, one of the attractive aspects of social media is that it either has inherent chat capabilities or it facilitates news and status updates in real time, which provides the ability to further span temporal boundaries.

Other Media Characteristics

The 1980s and 1990s led to a plethora of studies in the comparison of face-to-face and CMC. Inspired by the work of Hiltz and Turoff (1978), researchers explored the media differences of the communication process. As mentioned, many of the early studies of CMC examined synchronous chat and e-mail in comparison to face-to-face communication. These studies tended to examine variables such as amount or quantity of communication (Hiltz, Turoff, & Johnson, 1986; Kiesler, Zubrow, Moses, & Geller, 1985), type of communication, such as task, relational, and inflammatory (Arunachalam & Dilla, 1992; Hiltz, Turoff, & Johnson, 1986; Kiesler, Siegel, & McGuire, 1984; Kiesler, Zubrow, Moses, & Geller, 1985; Rice & Love, 1987), equality of participation (Hiltz, Turoff, & Johnson, 1986, 1989; Dubrovsky, Kiesler, & Sethna, 1991), relationship development (Walther & Burgoon, 1992), satisfaction (Jarvenpaa, Rao, & Huber, 1988), and quality of outcome (Arunachalam & Dilla, 1992; Hiltz, Turoff, & Johnson, 1986; Hollingshead, McGrath, & O'Connor, 1993; Jarvenpaa, Rao, & Huber, 1988).

One effect of CMC widely thought of as an advantage is its capacity to facilitate equality of participation or to create a more democratic experience (Hiltz, Turoff, & Johnson, 1986; Dubrovsky, Kiesler, & Sethna, 1991). Many researchers noted that due to the lack of social cues in communication technologies, such as e-mail and chat, individuals all had an equal opportunity to communicate and to have their voices heard. Some participants who might have previously withdrawn from conversations or not contributed tended to participate as much as others. Also, we have seen similar findings in research examining other communication technologies, such as online asynchronous discussion

forums (Chen & Chiu, 2008). Although early CMC tools did reduce many cues, it did not eliminate them all, leading to conflicting conclusions regarding the equality of participants and a democratic experience. However, social media has the potential to facilitate equality of participation because it is characteristically open and free, accessible to all individuals. Web 2.0 and social media, it has been noted, provide a more democratic process as well (see Graham, 2005).

Several studies illustrated the efficiency of CMC or showed that the quantity of communication was lower in computer-mediated channels (Hiltz, Turoff, & Johnson, 1986; Kiesler, Zubrow, Moses, & Geller, 1985). Some may argue that the decreased amount of communication had a negative impact on the quality of the interactions. Alternatively, the lower levels of communication could indicate a more efficient experience. Again, social media portrays the same media characteristic of efficiency and has become one reason why individuals appreciate these tools (e.g., Kaplan & Haenlein, 2010). For instance, you can easily search and connect with another individual and exchange communication with a succinct character count. Social media provides communication in a very consumable form. That's a plus in today's society when we are on information overload and have hundreds, if not thousands, of e-mails in our inbox, which we find difficult to manage.

Other studies have reported the ability of CMC to facilitate task and socioemotional communication (Arunachalam & Dilla, 1992; Hiltz, Turoff, & Johnson, 1986; Kiesler, Siegel, & McGuire, 1984; Kiesler, Zubrow, Moses, & Gellar, 1985; Rice & Love, 1987). Most researchers examining individuals completing a work-related task noted that the communication tended to be more task-oriented rather than relational-based, indicating that CMC can lead to higher performance due to the task focus of the communication. This was believed to be due in part to the characteristics of the medium (usually e-mail or chat) as being lean, text-based, and lacking social cues. However, the potential and evidence of "the most intimate of exchanges" between individuals that had never met face-to-face was noted early on (Hiltz & Turoff, 1978, p. 28). Later, Walther (1996, 2007) argued that when using CMC, individuals will refer to the social cues available to them in forming impressions of other individuals. Because of the tendency to focus on the positive attributes in a computer-mediated setting, this may lead to an inflated, yet favorable impression, which eventually leads to an increased liking of another individual or hyperpersonal communication. Therefore, another characteristic of CMC is the potential for individuals to build relationships without face-to-face interactions. The ability of social media to build and maintain relationships though CMC is well noted (e.g., Boyd, 2008; Ellison, Steinfield, & Lampe, 2007; Lenhart & Madden, 2007).

Social Media: A Definition

In this chapter, I have approached the definition of social media through various lenses. I aggregated the feedback and solutions provided by colleagues, explored social media as a Web 2.0 technology, and examined social media as social process facilitating similar media characteristics as CMC.

In summary, social media is web-based and developed through Web 2.0 applications and ideologies where anyone can participate due to the democratic nature and the expected equality of participation. Individuals participating in social media are communicating, encoding, transmitting, and decoding messages at a basic level. Usually this communication takes the form of user-generated content (UGC) which is created, shared, and gathered. Communication is predominately efficient. The social process is distanciated through time and space; individuals can participate anytime and anywhere. Social interactions can equally assist individuals in completing a task or building and maintaining relationships. Or more simply put, social media are: Virtual places where people share; *everybody and anybody can share anything anywhere anytime.*